

Appendix table 7-8

Correct answers to trend factual knowledge of science questions, by respondent characteristic: 1992–2010

(Average percent correct)

| Characteristic | 1992 (n = 1,995) | 1995 (n = 2,006) | 1997 (n = 2,000) | 1999 (n = 1,882) | 2001 (n = 1,574) | 2006 (n = 1,864) | 2008 (n = 2,021) | 2010 (n = 1,932) |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| All adults | 59 | 60 | 60 | 61 | 64 | 64 | 64 | 63 |
| Sex | | | | | | | | |
| Male | 64 | 65 | 66 | 66 | 69 | 69 | 68 | 67 |
| Female | 55 | 55 | 55 | 57 | 59 | 60 | 60 | 59 |
| Formal education | | | | | | | | |
| <High school | 44 | 44 | 43 | 44 | 45 | 44 | 43 | 42 |
| High school graduate | 59 | 59 | 60 | 62 | 62 | 62 | 63 | 60 |
| Baccalaureate | 73 | 68 | 75 | 77 | 80 | 74 | 77 | 78 |
| Graduate/professional | 80 | 77 | 80 | 83 | 80 | 82 | 81 | 80 |
| Science/mathematics education ^a | | | | | | | | |
| Low | 52 | 52 | 51 | 53 | 55 | 56 | 57 | 55 |
| Middle | 66 | 68 | 66 | 71 | 72 | 69 | 70 | 68 |
| High | 79 | 80 | 83 | 82 | 84 | 82 | 82 | 83 |
| Family income (quartile) | | | | | | | | |
| Top | NA | NA | NA | NA | NA | 71 | 74 | 73 |
| Second | NA | NA | NA | NA | NA | 69 | 69 | 69 |
| Third | NA | NA | NA | NA | NA | 65 | 63 | 63 |
| Bottom | NA | NA | NA | NA | NA | 56 | 56 | 54 |
| Age (years) | | | | | | | | |
| 18–24 | 59 | 63 | 64 | 65 | 66 | 68 | 67 | 64 |
| 25–34 | 64 | 64 | 63 | 65 | 68 | 64 | 67 | 67 |
| 35–44 | 65 | 64 | 66 | 66 | 66 | 67 | 63 | 63 |
| 45–54 | 61 | 62 | 61 | 64 | 68 | 68 | 67 | 65 |
| 55–64 | 53 | 52 | 57 | 58 | 61 | 64 | 65 | 63 |
| ≥65 | 47 | 47 | 45 | 46 | 49 | 53 | 54 | 54 |
| Verbal ability ^b | | | | | | | | |
| 0–4 | NA | NA | NA | NA | NA | 48 | 47 | 46 |
| 5 | NA | NA | NA | NA | NA | 60 | 58 | 55 |
| 6 | NA | NA | NA | NA | NA | 66 | 63 | 63 |
| 7 | NA | NA | NA | NA | NA | 70 | 73 | 67 |
| 8–10 | NA | NA | NA | NA | NA | 77 | 80 | 80 |

NA = not available, question not asked

^aLow = ≤5 high school and college science/math courses; middle = 6–8 courses; high = ≥9 courses.^bMeasure based on correct responses to a 10-item, multiple-choice test of vocabulary knowledge. Categories represent number of correct responses.

NOTES: Percentage of nine questions in trend factual knowledge of science scale answered correctly. "Don't know" responses and refusals to respond count as incorrect. Table includes all years for which data collected. Questions in trend factual knowledge of science scale listed below:

- *The center of the Earth is very hot.* (True)
- *All radioactivity is man-made.* (False)
- *It is the father's gene that decides whether the baby is a boy or a girl.* (True) Or (in 2008) *It is the mother's gene that decides whether the baby is a boy or a girl.* (False) (Split ballot in 2008; 1,251 survey respondents asked about "father's gene"; 254 survey respondents asked about "mother's gene.")
- *Lasers work by focusing sound waves.* (False)
- *Electrons are smaller than atoms.* (True)
- *Antibiotics kill viruses as well as bacteria.* (False)
- *The continents on which we live have been moving their locations for millions of years and will continue to move in the future.* (True)
- *Does the Earth go around the Sun, or does the Sun go around the Earth?* (Earth around Sun)
- *How long does it take for the Earth to go around the Sun?* (1 year) (Asked only if respondent answered correctly that Earth goes around Sun.)

SOURCES: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Public Attitudes Toward and Understanding of Science and Technology (1992–2001); and University of Chicago, National Opinion Research Center, General Social Survey (2006–10).